

SPS IPC Drives 2018, Hall 11

Protecting pumps in hazardous areas easily and reliably against dry running

- **New type of active power-based dry running protection for pumps with certification according to ATEX and IEC Ex**
- **Current/voltage detection modules for the Simocode pro motor management system**
- **Previously required additional sensor technology is eliminated**
- **Higher levels of system availability and economic efficiency.**

A new type of detection technology from Siemens protects centrifugal pumps from dry running in hazardous areas. For this purpose, the corporation has developed special current/voltage detection modules for its Simocode pro motor management system. The principles and practical applicability of this technology have been investigated within the scope of a research cooperation project with the Physikalisch-Technische Bundesanstalt (National Metrology Institute of Germany) in order for it to be certified as an ignition source monitoring device corresponding to a type b1 ignition protection system according to ATEX and IEC Ex.

Simocode pro uses measuring modules to monitor the active electric power consumption of the pump motor to detect a diminishing flow rate and shut off the pump in good time at defined limit values to prevent impending dry running. Additional sensor technology otherwise required to monitor the pump for dry running can be eliminated. A menu-guided teach-in procedure in the engineering software helps the user to set the limit values. The advantages of the new type of active power-based dry running protection from Siemens are not only less hardware, early detection of faults and the avoidance of damage to the pump but also safe, reliable explosion protection, savings in time and money spent on maintenance, as well as higher system availability and economic efficiency.

Background information:

Safety has top priority wherever flammable media are used in industry. This applies in particular to the chemical industry, where flammable liquids are produced, processed and transported by pumps in hazardous areas. If the pumps start to run dry, hazardous conditions may arise inside and outside the pumps, such as air-gas mixtures, sparking and high temperatures caused by friction. The power consumption of electrically driven centrifugal pumps falls in the event of dry running, so Simocode pro switches the pumps off when consumption falls below a minimum value. This eliminates the installation of conventional monitoring devices, such as level sensors. The Simocode pro motor management system offers comprehensive protection, monitoring and control functions for the safe disconnection of motors, integration in process control systems such as Simatic PCS 7, and a large number of interfaces for system-wide communication. Simocode pro makes detailed operating, service and diagnostic data as well as process and measured values available to higher-level systems and cloud solutions.



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You will find this press release and a press photo at

www.siemens.com/press/PR2018110067DFEN

For further information, go to www.siemens.com/simocode

Further information about Siemens at the SPS IPC Drives 2018 is available at

www.siemens.com/sps-ipc-drives and www.siemens.com/press/sps2018

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